possesses so little activity that the peasants eat it, it is so active in the Isle of Ceos that in view of its immediate and rapid action, all who have attained the age of sixty are poisoned with it in order that food may be left for the remainder of the population. About 4 milligrammes (or .15 grain) of conicine are sufficient to kill a frog, and according to Orfila 10 or 12 drops prove fatal to a large dog.—*Practitioner*, Sept. 1869.

7. *Action of the Various Opium Alkaloids on the System.*—M. WALDEMAR BAXT, of St. Petersburg, has made elaborate researches on this subject, and comes from them to the following conclusions: 1. The whole group of opium alkaloids taken together constitute a series of agents with two specially characteristic actions—*narcotic* and *tetanically convulsive.* 2. Each individual alkaloid possesses one or the other of these characteristic effects exclusively, or else a blending of the two opposed actions, in consequence of which the one or the other becomes prominent, while the other is more feebly pronounced. 3. The first place as a pure *narcotic* must be given to papaverine. It is followed by morphia, narceia, codeia, etc., with constant diminution of the narcotic character of the influence, and continually increasing convulsive tendencies, which, in thebain, reach the level of complete tetanus, indistinguishable from that produced by strychnia, except by the size of the dose required. 4. Thebain holds the highest place as a convulsive, and following it in diminishing order come porphyroxin, narcotine, codeia, etc., with gradual loss of convulsive and gain of narcotic power. 5. Thebain is quite similar in its action to strychnia; and as larger doses are required, it may be that we shall come to employ it in the cases where strychnia is now used, on account of its less dangerous qualities. 6. Papaverine, while producing the same effects as morphia, has the preference over the latter in cases where the latter cannot be used on account of its unpleasant after-results, none of which can follow papaverine. 7. Papaverine and morphia, acting quite oppositely to strychnia and thebain, may be employed with advantage in cases of poisoning with the latter substances. 8. Papaverine and morphia act first on the peripheral ends of the sensory nerves; they can therefore be employed as local anæsthetics in neuralgia, and in various neuralgias without central lesion. 9. The muscles and the motor nerves suffer no change in function from the action, either of papaverine or morphia. 10. Papaverine and morphia especially diminish reflex excitability, for they first affect the peripheral ends of the sensory nerves, and partly, also, perhaps the sensitive fibres in their course, and probably also the central brain elements. 11. Autochthonous reflex inhibition centres are not affected recognizably by either papaverine or morphia.—*Practitioner*, Sept. 1869, from *Archiv f. Anat. u. Physiol. Reichert u. Dubois-Reymond*, No. 2, 1869.

8. *Therapeutic Value of the Cinchona Alkaloids.*—*The Indian Annals of Medical Science* (No. xxv., Jan. 1869) contains a long report on this subject by Dr. JOS. EWART. The therapeutical value of the sulphates of Quinidina, Cinchonidina and Cinchonia was tested by Dr. E. during the highly malarious month of Oct. 1866, on the fever cases admitted into the Medical College Hospital. The mode of using the alkaloids was, whenever practicable, to give a twenty-grain dose in the sweating stage of intermittent fever, and to follow this up by five or ten-grain doses every four hours during the intermission; or, when the paroxysm was successfully averted, three times a day. And these or smaller doses, if deemed judicious, were had recourse to daily, in the manner prescribed, until the tendency to recurrence of the paroxysms appeared to have been completely broken. In *remittent fever*, the twenty-grain dose was not exhibited unless the remission was *very* well pronounced. But from three to ten-grain doses were given, three or four times a day, throughout the case, regardless of the exacerbation, in conformity to my plan of giving quinia in analogous cases. As with quinia, so with quinidina, cinchonidina and cinchonia, the object here is, gradually to saturate the system with the antiperiodic, so that when a well-defined remission does occur, a sufficient quantity may have been absorbed to moderate or prevent a repetition of the febrile exacerbations.

The following are the general conclusions drawn by Dr. E. from his experiments:—

(*a.*) Sulphate of Quinidina is an excellent antiperiodic in from 20 to 10 or 5-grain doses. It is probably not inferior in power to quinia. It is easily tolerated by the stomach. (*b.*) Quinidina is a good bitter tonic in from 5 to 3-grain doses. It may be combined with ferruginous tonics in case of anæmia. (*c.*) Quinidina is less disagreeable to the taste and stomach than quinia; moreover it is not accompanied with the unpleasant effects expressed under the term cinchonism.

Sulphate of *Cinchonidina.* (*a.*) Cinchonidina stands next to Quinidina in antiperiodic power. Dose, as an antiperiodic, 20 to 10 grains; as a tonic, 5 to 3 grains. (*b.*) Cinchonidina is agreeable to the stomach, and is not accompanied by symptoms analogous to cinchonism.

Sulphate of *Cinchonia.* (*a.*) This is, doubtless, an antiperiodic, in from 20 to 10-grain doses. (*b.*) The irritability of stomach set up by it is *the* great objection to its ever taking rank as a substitute for either of the preceding alkaloids. (*c.*) This may probably be obviated, to a certain extent, by injecting an efficient solution of it underneath the skin by the hypodermic method. (*d.*) Cinchonia is a good tonic in from 5 to 3-grain doses.

9. *Kinovic Acid.*—Dr. KERNER states (*Deutsche Klin.*, xx. p. 81.) that this acid is the chief cause of the tonic properties of cinchona bark, and recommends its employment as a therapeutic agent. He employs kinovate of lime as the best form for the administration of the acid; to be given in the form of powder. When given even in large doses it produces no cerebral congestion, as the nitrogenous constituents of bark do, and adults experience not the slightest ill effects after taking daily half or three-quarters of an ounce of the salt. It acts as a bitter and tonic, and is superior to most other bitters. Its most striking effect is upon the peristaltic movement of the intestines, which is at once abated; hence the remedy is a valuable one in severe dysentery and in nervous diarrhœa. Forty grains of the kinovate of lime in powder, or the same quantity in water, to which sufficient phosphoric acid is to be added to precipitate the kinovic acid, is an average dose.—*Syd. Soc. Bienn. Retrosp.* 1869.

10. *Therapeutic Action of the Iodides of Potassium and Sodium.*—M. RABUTEAU has lately made some experiments on the iodides of these alkalies which have a direct therapeutical bearing. He dieted himself for the space of a month, as far as possible, upon the same kind and quantity of food, and found that he eliminated from 325 to 372 grains of urea daily. He then took 15½ grains of iodide of potassium daily, and found that the quantity of urea daily excreted fell to between 201 and 294 grains. And a similar result was obtained with the iodide of sodium; the diet in both instances continuing unchanged. The absolute quantity of urine discharged was not increased unless, owing to dryness of the throat, more water was ingested. Now, since arsenic taken in small doses occasions the same changes in the urine, and both this and the iodides cause an increase of the appetite and a tendency to the deposit of fat in the body, M. Rabuteau proposes that they should be employed in combination where no counter-indication exists, as remedial means, especially in phthisis, in intermittent fevers, and articular rheumatism, whilst they may also be combined with well-known specifics, as quinia, etc. In gout, iodide of potassium, in large doses, is of value on account of its solvent powers on uric acid.—*Practitioner,* Sept. 1869, from *Centralblatt,* May 29.

11. *Action of Tartarized Antimony on the Animal Organism.*—From experiments instituted by A. NOBILING (*Schmidt's Jahrbuch,* 1868) to determine what are the effects upon the living organism of tartarized antimony when given in small doses continued for a length of time, he deduces the following conclusions: 1. Tartarized antimony produces two distinct effects, one upon the heart, another upon the alimentary canal. 2. Each of these effects respectively is produced by a single one of the chemicals which enter into the composition of tartarized antimony. The alkali and the antimony. The influence of the first